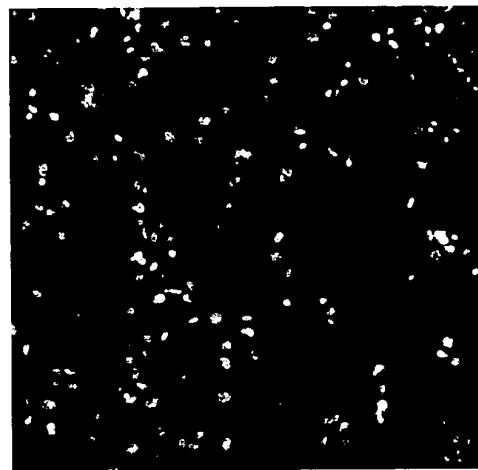
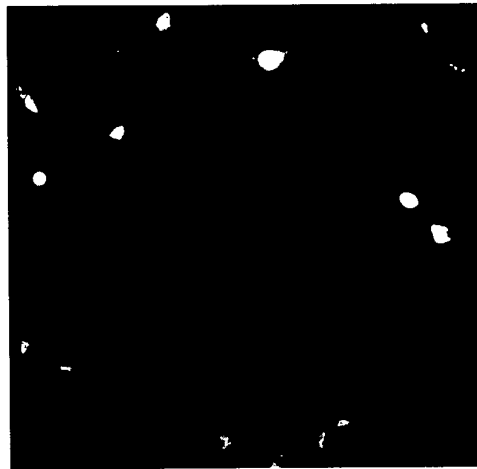


Figure 1



Hoechst 33342 Stain



Green Fluorescent Protein

Figure 2

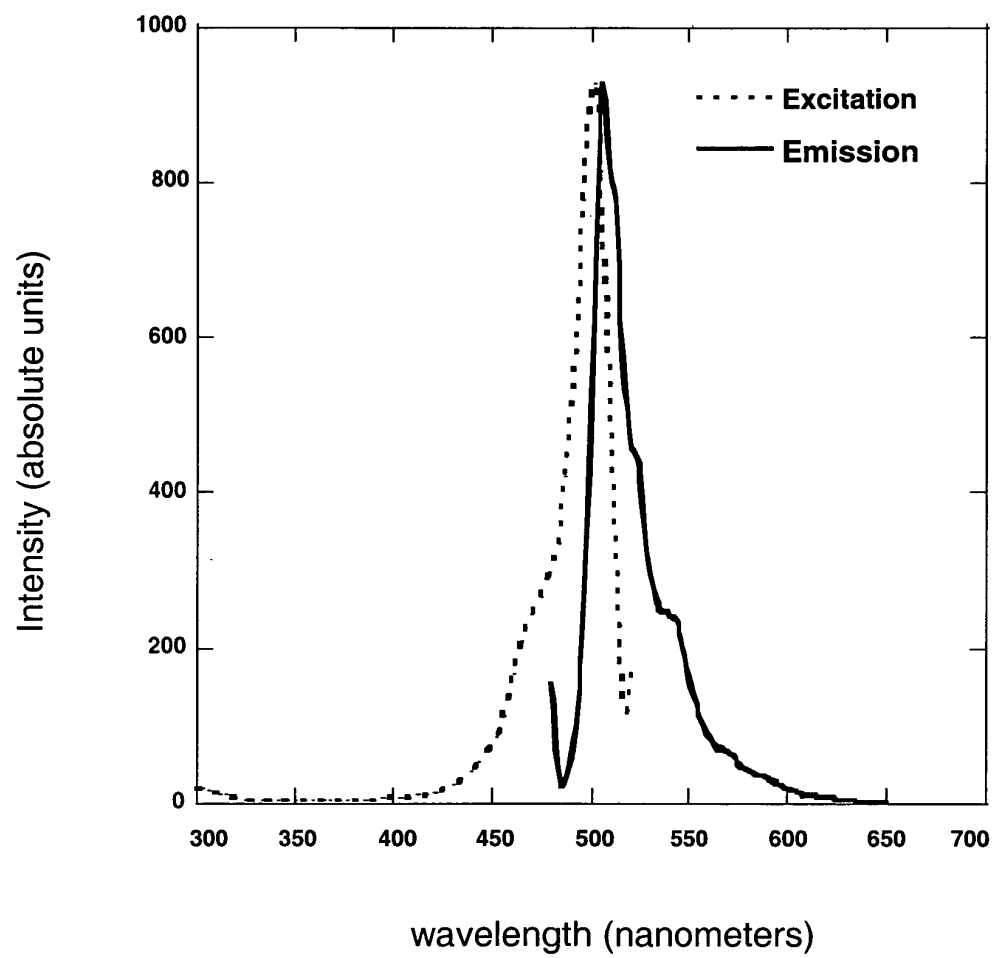


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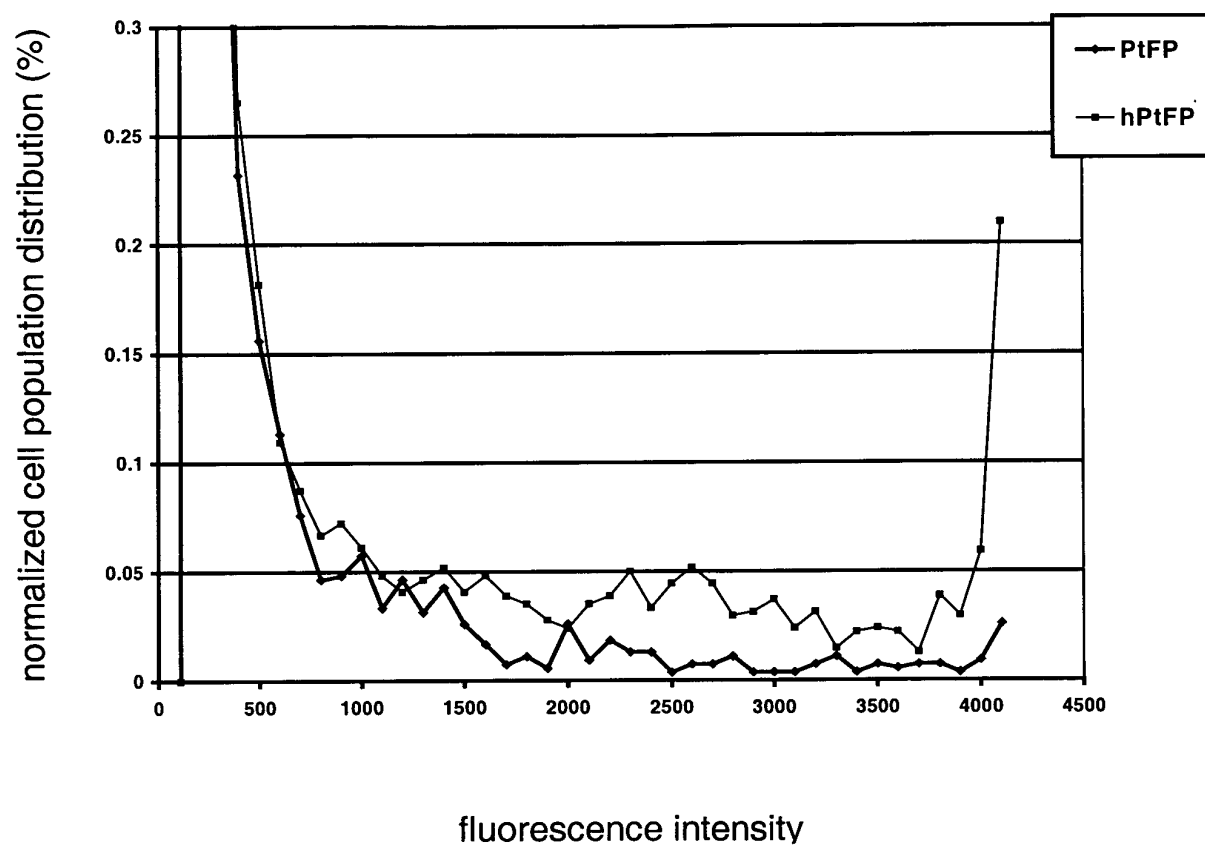
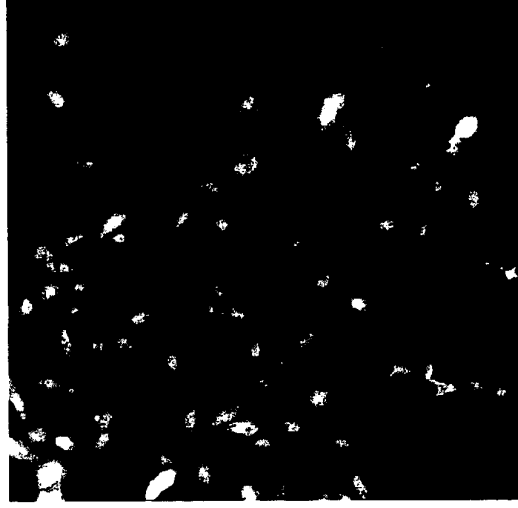


Figure 4



HEK 293 cells



A549 cells

Figure 5

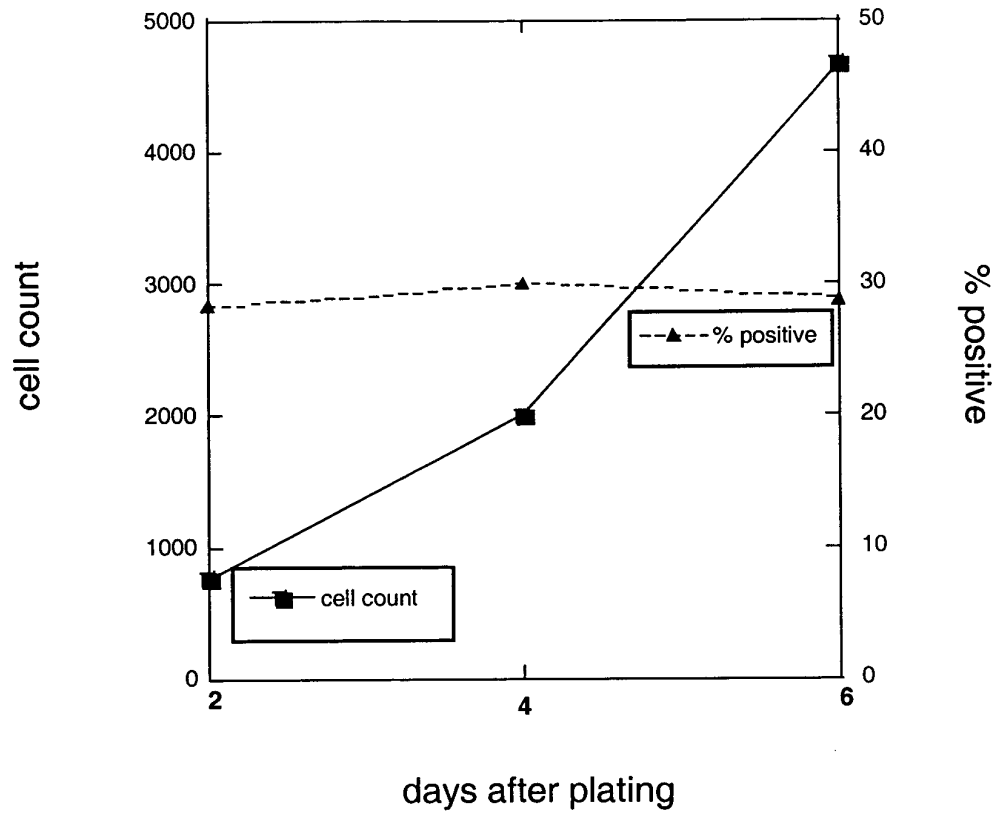
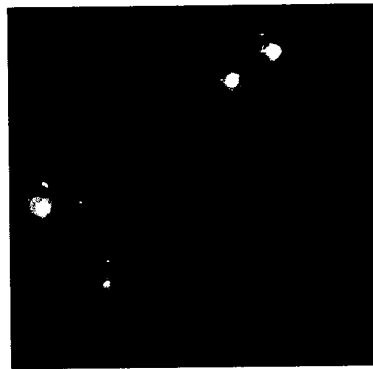


Figure 6

A



B



C

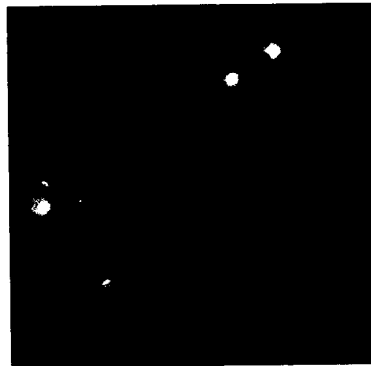


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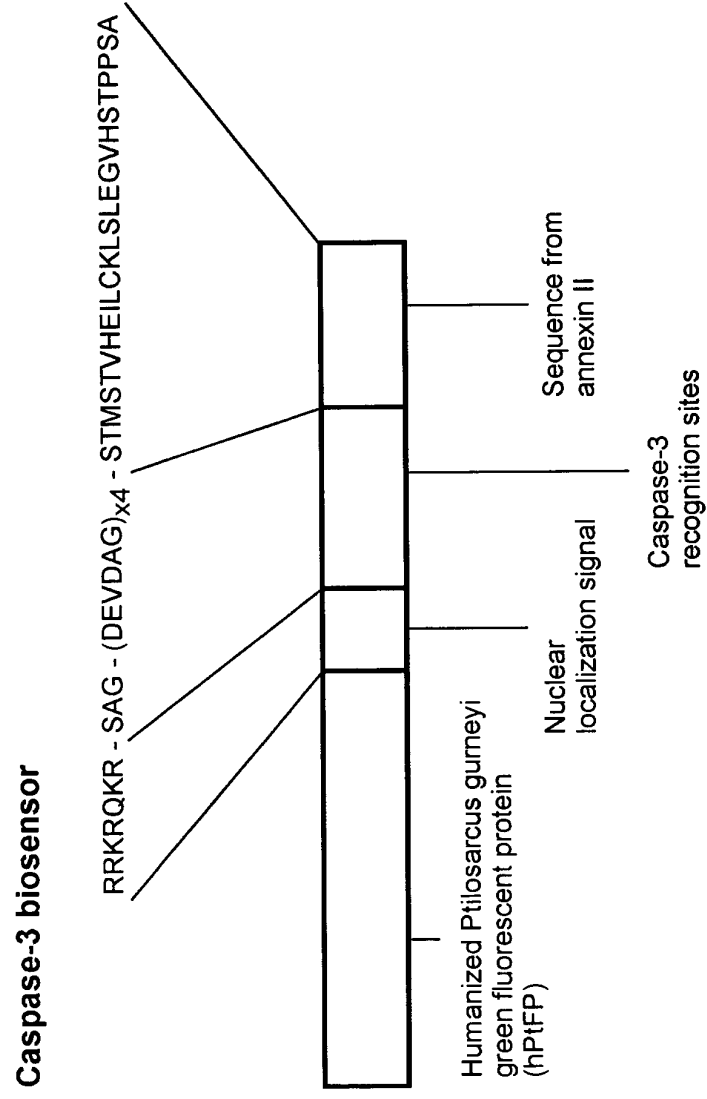


Figure 8

Caspase-8 biosensor

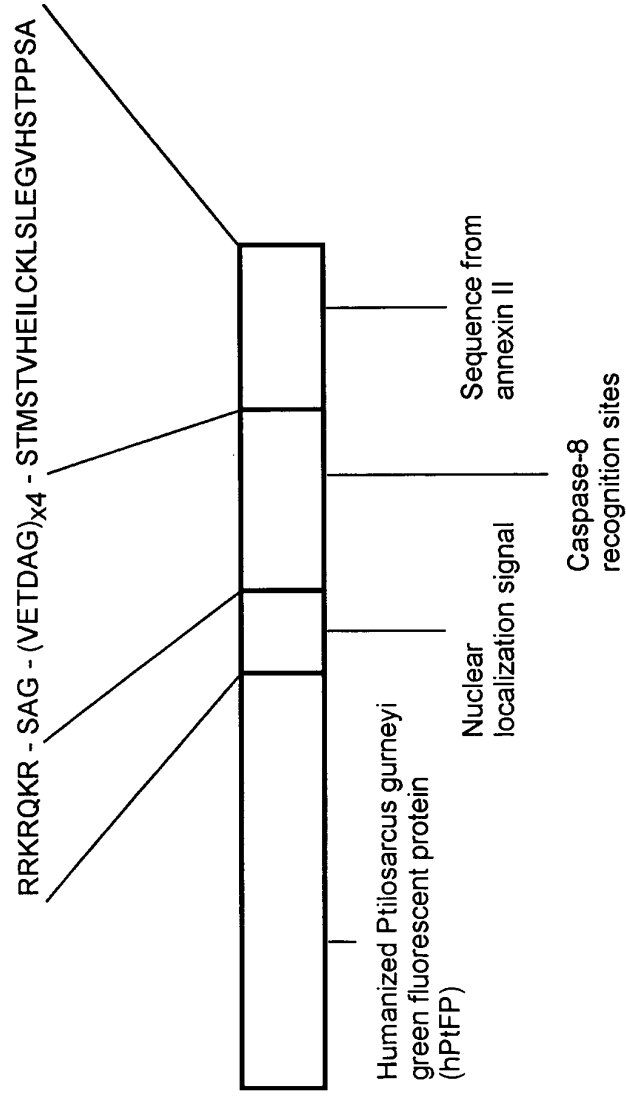


Figure 9

Figure 10

HindIII

```

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   TTC GAA CGG TGG TAC CAC TTG GCC TTG CAC GAC TTC TTG TGG CCG

+1  L   K   E   I   M   S   A   K   A   S   V   E   G   I   V
46  CTG AAG GAG ATC ATG AGC GCC AAG GCC AGC GTG GAG GGC ATC GTG
   GAC TTC CTC TAG TAC TCG CGG TTC CGG TCG CAC CTC CCG TAG CAC

+1  N   N   H   V   F   S   M   E   G   F   G   K   G   N   V
91  AAC AAC CAC GTG TTC AGC ATG GAG GGC TTC GGC AAG GGC AAC GTG
   TTG TTG GTG CAC AAG TCG TAC CTC CCG AAG CCG TTC CCG TTG CAC

+1  L   F   G   N   Q   L   M   Q   I   R   V   T   K   G   G
136 CTG TTC GGC AAC CAG CTG ATG CAG ATC CGG GTG ACC AAG GGC GGC
   GAC AAG CCG TTG GTC GAC TAC GTC TAG GCC CAC TGG TTC CCG CCG

+1  P   L   P   F   A   F   D   I   V   S   I   A   F   Q   Y
181 CCT CTG CCC TTC GCC TTC GAC ATC GTG AGC ATC GCC TTC CAG TAC
   GGA GAC GGG AAG CGG AAG CTG TAG CAC TCG TAG CGG AAG GTC ATG

+1  G   N   R   T   F   T   K   Y   P   D   D   I   A   D   Y
226 GGC AAC CGG ACC TTC ACC AAG TAT CCC GAC GAC ATC GCC GAC TAC
   CCG TTG GCC TGG AAG TGG TTC ATA GGG CTG CTG TAG CGG CTG ATG

+1  F   V   Q   S   F   P   A   G   F   F   Y   E   R   N   L
271 TTC GTG CAG AGC TTC CCT GCC GGC TTC TTC TAC GAG CGG AAC CTG
   AAG CAC GTC TCG AAG GGA CGG CCG AAG AAG ATG CTC GCC TTG GAC

+1  R   F   E   D   G   A   I   V   D   I   R   S   D   I   S
316 CGG TTC GAG GAC GGC GCC ATC GTG GAC ATC CGG AGC GAC ATC AGC
   GCC AAG CTC CTG CCG CGG TAG CAC CTG TAG GCC TCG CTG TAG TCG

+1  L   E   D   D   K   F   H   Y   K   V   E   Y   R   G   N
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   GAC CTC CTG CTG TTC AAG GTG ATG TTC CAC CTC ATG GCG CCG TTG

+1  G   F   P   S   N   G   P   V   M   Q   K   A   I   L   G
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   CCG AAG GGA TCG TTG CCG GGA CAC TAC GTC TTC CGG TAG GAC CCG

+1  M   E   P   S   F   E   V   V   Y   M   N   S   G   V   L
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   TAC CTC GGG TCG AAG CTC CAC CAC ATG TAC TTG TCG CCG CAC GAC

+1  V   G   E   V   D   L   V   Y   K   L   E   S   G   N   Y
496 GTG GGC GAG GTG GAC CTG GTG TAC AAG CTG GAG AGC GGC AAC TAC
   CAC CCG CTC CAC CTG GAC CAC ATG TTC GAC CTC TCG CCG TTG ATG

+1  Y   S   C   H   M   K   T   F   Y   R   S   K   G   G   V

```

0997897-01102

Figure 10 (continued)

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 ATG TCG ACG GTG TAC TTC TGG AAG ATG GCC TCG TTC CCG CCG CAC

+1 K E F P E Y H F I H H R L E K
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 TTC CTC AAG GGA CTC ATG GTG AAG TAG GTG GTG GCC GAC CTC TTC

+1 T Y V E E G S F V E Q H E T A
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 TGG ATG CAC CTC CTC CCG TCG AAG CAC CTC GTC GTG CTC TGG CGG

+1 I A Q L T T I G K P L G S L H
 676 ATC GCC CAG CTG ACC ACC ATC GGC AAG CCT CTG GGC AGC CTG CAC
 TAG CGG GTC GAC TGG TGG TAG CCG TTC GGA GAC CCG TCG GAC GTG

NotI

 +1 E W V *
 721 GAG TGG GTG TAA AGC GGC CGC
 CTC ACC CAC ATT TCG CCG GCG

009789-01402

The coding sequence (from start codon to stop codon):

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Figure 11

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Figure 12

Figure 13

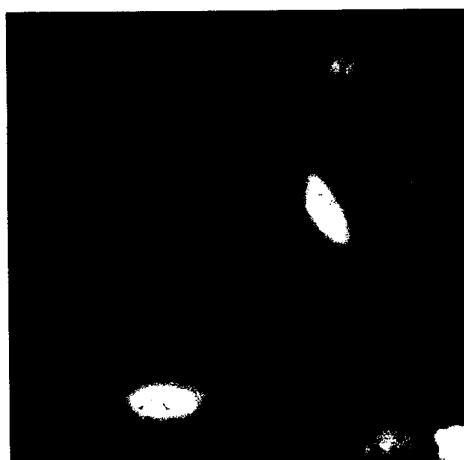
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TS1	+																											
TS2	+																											
TS3	+																											
TS4	-																											
TS5	+																											
TS6	++																											
TS7	+																											
TS8	+																											
TS9	+																											
TS10	-																											
TS11	-																											

2017.10.26 14:56

Figure 14



no treatment



Staurosporine
10 nM 6 hours



Staurosporine
1 nM 24 hours

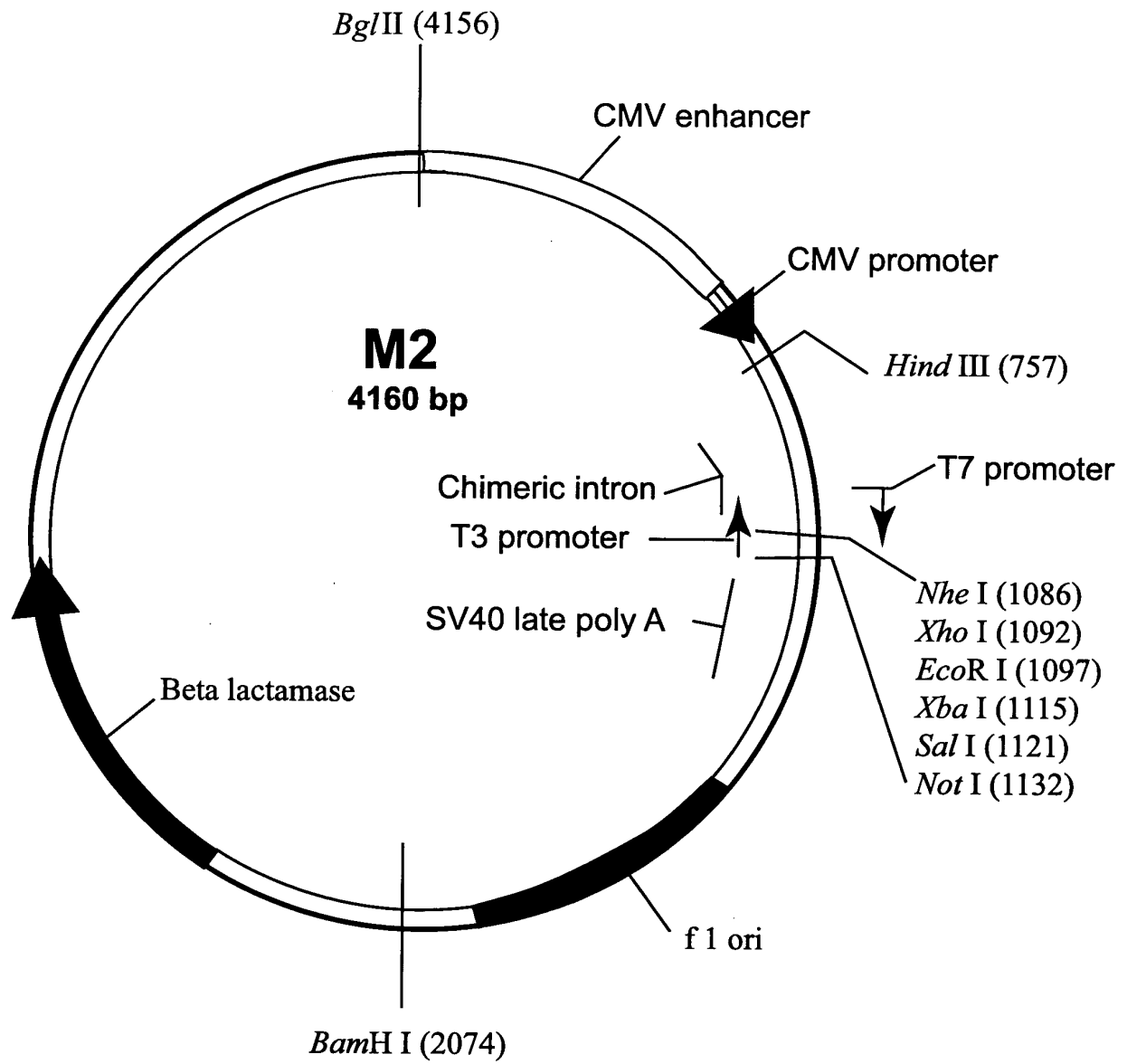
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2020 2020 2020

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UUG L 0.13 (135218)	UCG S 0.06 (49456)	UAG * 0.21 (5913)	UGG W 1.00 (142435)
CUU L 0.13 (139009)	CCU P 0.28 (189374)	CAU H 0.41 (113684)	CGU R 0.08 (51100)
CUC L 0.20 (210903)	CCC P 0.33 (219428)	CAC H 0.59 (162826)	CGC R 0.19 (118404)
CUA L 0.07 (75667)	CCA P 0.27 (182506)	CAA Q 0.26 (130857)	CGA R 0.11 (68664)
CUG L 0.40 (435317)	CCG P 0.11 (76684)	CAG Q 0.74 (377006)	CGG R 0.21 (126679)
AUU I 0.35 (174021)	ACU T 0.24 (140780)	AAU N 0.46 (186915)	AGU S 0.15 (131222)
AUC I 0.49 (240138)	ACC T 0.36 (213626)	AAC N 0.54 (218376)	AGC S 0.24 (211962)
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AUG M 1.00 (244236)	ACG T 0.12 (69346)	AAG K 0.58 (359627)	AGG R 0.20 (123646)
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Figure 15

Figure 16



20170726 16:58:46

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Figure 17

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Figure 17 (continued)

Figure 18

